SCS Seismic Bypass Framing Connector

**An Innovative Hybrid Clip That Does It All — Specifically Designed for Higher Seismic Capacity**

The first product of its type to undergo full-scale cyclic research testing to determine its load capacities in real-world conditions, the SCS is a hybrid clip designed specifically to allow both slide-clip or fixed-clip applications in areas of high seismic activity. Everything about the SCS clip — from its heavy-duty 10- and 12-gauge steel manufacturing to its strategically placed darts to the location of its fastener slots and holes — has been engineered to provide exceptional resistance to in-plane seismic loads. Because slide-clip testing shows that attachment at the first slot is most critical to in-plane capacity, the SCS is designed to accommodate two large washer screws (included) at the first slot attached to the stud.

The hole types and locations maximize the SCS clip’s versatility, with three prepunched oblong slots for slide-clip applications and a pattern of round holes allowing fixed-clip options to meet a range of loads. In addition, the support leg features anchor holes for concrete supports using ¼"- or ½"-diameter concrete screws or bolts, plus smaller holes for steel supports using powder-actuated fasteners such as Simpson Strong-Tie® PDPAT 0.157"-diameter pins or #12 self-drilling Strong-Drive® XL Large-Head Metal screws.

**Features**
- 3½", 6" and 8" lengths
- Slide slots used with shouldered washer screws (included) allow a full 1" of vertical deflection
- Precision-located stiffeners enhance strength while allowing ductility
- Simpson Strong-Tie No-Equal® stamps alongside slide slots indicate proper screw placement
- Dual-function clip with pre-punched slots for slide application and small round holes for fixed application

**Material:** 10 ga. (97 mil) and 12 ga. (118 mil), 50 ksi

**Finish:** Galvanized (G90)

**Installation**
- SCS32-5 permits 1" max standoff fixed-applications and 1½" max slide applications. SCS62-5 and SCS82-5 max standoff are 2¼" fixed-applications and 3" slide applications.
- Use the specified type and number of anchors.
- Slide applications: Use the specified number of XLSH78B1414 #14 shoulder screws (included). Install the screws in the slots adjacent to the No-Equal stamps. Fixed applications: Use the specified number of #10 screws (not included) in the designated screw holes.

**Codes:** Testing performed in accordance with ICC-ES AC261.

Visit strongtie.com for the latest load values and testing information.

**Ordering Information**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Order SKU</th>
<th>Thickness mil (ga.)</th>
<th>L (in.)</th>
<th>A (in.)</th>
<th>B (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS82-5/118</td>
<td>SCS82-5/118-KT25</td>
<td>118 (10)</td>
<td>8</td>
<td>1½</td>
<td>1½</td>
</tr>
</tbody>
</table>

SCS32-5/97-KT25 comes with 55 screws for slide clip applications. All other SCS kits come with 83 screws for slide clip applications.

© 2018 Simpson Strong-Tie Company Inc. F-CF-SCS18
F2
F1
F3
SIMPSON Strong-Tie
SCS62-5/97
Use & Warning: strongtie.com/info

Minimum end distance of ½" is required from the center of the screw to the end of the stud.

Lap and fasten as required.

Standoff = 1½" max.
First slot near bend (2) shoulder screws.
Last slot away from bend (1) shoulder screw as shown.

Standoff = 3" max.
Middle slot (2) shoulder screws.
Last slot away from bend (1) shoulder screw as shown.

Typical SCS Slide Clip Installation

Typical SCS Slide Clip Installation with Stud Strut

SCS Slide-Clip Allowable Connector Loads (lb.)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Framing Members Thickness mil (ga.)</th>
<th>Fastener Pattern</th>
<th>No. of #14 Shoulder Screws</th>
<th>Max. Standoff Distance (in.)</th>
<th>In-Plane Load $F_1$</th>
<th>Tension Load $F_2$</th>
<th>Comp. Load $F_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS32-5/97</td>
<td>33 (20)</td>
<td>S1</td>
<td>2</td>
<td>1½</td>
<td>200</td>
<td>420</td>
<td>420</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>33 (20)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>205</td>
<td>630</td>
<td>760</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S2</td>
<td>3</td>
<td>3</td>
<td>205</td>
<td>630</td>
<td>760</td>
</tr>
<tr>
<td>SCS62-5/118</td>
<td>33 (20)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>265</td>
<td>650</td>
<td>760</td>
</tr>
<tr>
<td>SCS82-5/118</td>
<td></td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>265</td>
<td>650</td>
<td>760</td>
</tr>
<tr>
<td>SCS32-5/97</td>
<td>43 (18)</td>
<td>S1</td>
<td>2</td>
<td>1½</td>
<td>290</td>
<td>540</td>
<td>540</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>43 (18)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>350</td>
<td>895</td>
<td>1,165</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S2</td>
<td>3</td>
<td>3</td>
<td>335</td>
<td>895</td>
<td>1,165</td>
</tr>
<tr>
<td>SCS62-5/118</td>
<td>43 (18)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>435</td>
<td>940</td>
<td>1,165</td>
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<td>S1</td>
<td>3</td>
<td>1½</td>
<td>435</td>
<td>940</td>
<td>1,165</td>
</tr>
<tr>
<td>SCS32-5/97</td>
<td>54 (16)</td>
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<td>3</td>
<td>1½</td>
<td>650</td>
<td>1,635</td>
<td>2,025</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>54 (16)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>650</td>
<td>1,635</td>
<td>2,025</td>
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<td></td>
<td></td>
<td>S2</td>
<td>3</td>
<td>3</td>
<td>620</td>
<td>1,635</td>
<td>1,530</td>
</tr>
<tr>
<td>SCS62-5/118</td>
<td></td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>650</td>
<td>1,825</td>
<td>2,085</td>
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<tr>
<td>SCS82-5/118</td>
<td></td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>650</td>
<td>1,825</td>
<td>2,085</td>
</tr>
<tr>
<td>SCS32-5/97</td>
<td>68 (14)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>705</td>
<td>2,065</td>
<td>2,220</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>68 (14)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>705</td>
<td>2,065</td>
<td>2,220</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S2</td>
<td>3</td>
<td>3</td>
<td>670</td>
<td>2,065</td>
<td>2,220</td>
</tr>
<tr>
<td>SCS62-5/118</td>
<td></td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>705</td>
<td>2,065</td>
<td>2,220</td>
</tr>
<tr>
<td>SCS82-5/118</td>
<td></td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>705</td>
<td>2,065</td>
<td>2,220</td>
</tr>
<tr>
<td>SCS32-5/97</td>
<td>97 (12)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>975</td>
<td>2,060</td>
<td>2,160</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>97 (12)</td>
<td>S1</td>
<td>3</td>
<td>1½</td>
<td>975</td>
<td>2,060</td>
<td>2,160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S2</td>
<td>3</td>
<td>3</td>
<td>930</td>
<td>2,060</td>
<td>1,630</td>
</tr>
</tbody>
</table>

1. For additional important information, see General Information on p. 4.
2. SCS Allowable Connector Loads are also limited by the SCS Anchorage Load tables on pp. 5 and 6. Use the minimum tabulated values from the connector and anchorage load tables as applicable.
3. See illustrations on p. 4 for fastener placement to stud framing.
4. Tabulated $F_1$ loads are based on assembly tests with the load through the centerline of the stud. Tests are governed by fastener connections.
5. $F_2$ loads are based on maximum standoff distances of 1½" or 3" as shown. SCS32-5/97 maximum 1½" standoff.
Typical SCS Fixed-Clip Installation

SCS Fixed-Clip Allowable Connector Loads (lb.)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Framing Members Thickness mil (ga.)</th>
<th>Fasteners in Framing Member</th>
<th>No. of #10 Self-Drilling Screws</th>
<th>Max. Standoff Distance in.</th>
<th>In-Plane Load F&lt;sub&gt;1&lt;/sub&gt;</th>
<th>Tension Load F&lt;sub&gt;2&lt;/sub&gt;</th>
<th>Comp. Load F&lt;sub&gt;3&lt;/sub&gt;</th>
<th>Shear Load F&lt;sub&gt;4&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS32-5/97</td>
<td>33 (20)</td>
<td>R1</td>
<td>4</td>
<td>1</td>
<td>160</td>
<td>705</td>
<td>705</td>
<td>705</td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td>33 (20)</td>
<td>R1</td>
<td>6</td>
<td>2¼</td>
<td>150</td>
<td>1,060</td>
<td>1,060</td>
<td>650</td>
</tr>
<tr>
<td>R2</td>
<td>8</td>
<td>1</td>
<td>175</td>
<td>1,415</td>
<td>1,415</td>
<td>995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS62-5/118</td>
<td>54 (16)</td>
<td>R1</td>
<td>6</td>
<td>2¼</td>
<td>345</td>
<td>2,135</td>
<td>2,135</td>
<td>1,405</td>
</tr>
<tr>
<td>R2</td>
<td>8</td>
<td>1</td>
<td>410</td>
<td>4,275</td>
<td>3,125</td>
<td>3,005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3</td>
<td>10</td>
<td>1</td>
<td>445</td>
<td>4,275</td>
<td>3,350</td>
<td>3,005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS82-5/118</td>
<td>97 (12)</td>
<td>R1</td>
<td>6</td>
<td>2¼</td>
<td>675</td>
<td>4,720</td>
<td>4,095</td>
<td>3,180</td>
</tr>
<tr>
<td>R2</td>
<td>10</td>
<td>1</td>
<td>775</td>
<td>4,720</td>
<td>4,095</td>
<td>3,180</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. For additional important information, see General Information on p. 4.
2. SCS Allowable Connector Loads are also limited by the SCS Anchorage Load tables on pp. 5 and 6. Use the minimum tabulated values from the connector and anchorage load tables as applicable.
3. See illustrations on p. 4 for screw fastener placement to stud framing.
4. Tabulated F<sub>1</sub> loads are based on assembly tests with the load through the centerline of the stud. Tests are governed by fastener connections.
5. F<sub>2</sub> loads are based on maximum standoff distances of 1" or 2¼" as shown. SCS32-5/97 maximum 1" standoff.
6. XLSH78B1414 #14 shouldered screw may be used to replace #10 screws in a fixed application.
**Fastener Patterns**

### Slide Conditions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Pattern S1</th>
<th>Pattern S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS32-5/97</td>
<td><img src="image1" alt="Pattern S1" /></td>
<td><img src="image2" alt="Pattern S2" /></td>
</tr>
<tr>
<td>SCS62-5/97</td>
<td><img src="image3" alt="Pattern S1" /></td>
<td><img src="image4" alt="Pattern S2" /></td>
</tr>
<tr>
<td>SCS82-118</td>
<td><img src="image5" alt="Pattern S1" /></td>
<td><img src="image6" alt="Pattern S2" /></td>
</tr>
</tbody>
</table>

### Fixed Conditions

<table>
<thead>
<tr>
<th>Pattern R1</th>
<th>Pattern R2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="Pattern R1" /></td>
<td><img src="image8" alt="Pattern R2" /></td>
</tr>
</tbody>
</table>

### General Notes for Allowable Connector Load Tables

1. Allowable loads are for use when utilizing the traditional Allowable Stress Design methodology. Contact Simpson Strong-Tie® for LRFD loads unless otherwise noted.
2. Allowable loads are based on cold-formed steel members with a minimum yield strength, $F_y$, of 33 ksi and tensile strength, $F_u$, of 45 ksi for 43 mil (18 ga.) and thinner, and a minimum yield strength of 50 ksi and tensile strength of 65 ksi for 54 mil (16 ga.) and thicker.
3. Allowable loads may not be increased for wind or seismic load.
4. Allowable loads for #14 self-drilling screws are based on a minimum nominal shear strength, $P_{ss}$, of 3,130 lb. and nominal tension strength, $P_{ts}$, of 3,660 lb. Allowable loads for #12 self-drilling screws are based on a minimum nominal shear strength, $P_{ss}$, of 2,520 lb. and nominal tension strength, $P_{ts}$, of 2,535 lb. and the allowable loads for #10 self-drilling screws are based on a minimum nominal shear strength, $P_{ss}$, of 1,620 lb. and nominal tension strength, $P_{ts}$, of 2,460 lb.
5. It is the responsibility of the Designer to select the proper length fasteners based on installation need. Screw length must ensure fastener extends through the connection a minimum of three exposed threads.
6. Allowable loads for welded connections require E70XX electrodes with a minimum throat size equal to the clip thickness. Welding shall be in compliance with AWS D1.3. Welding galvanized steel may produce harmful fumes; follow proper welding procedures and precautions.
7. Allowable loads for welded connections require E70XX electrodes with a minimum throat size equal to the clip thickness. Welding shall be in compliance with AWS D1.3. Welding galvanized steel may produce harmful fumes; follow proper welding procedures and precautions.
8. Clips do not replace lateral or stability bracing. Design of bracing is the responsibility of the Designer.
9. It is the responsibility of the Designer to verify the adequacy of the stud. Allowable loads are based on clips installed an adequate distance away from penetrations, notches, ends of studs and other conditions that may affect the clip performance.
10. It is the responsibility of the Designer to check the adequacy of the supporting structure for loads imposed by connectors.
11. Industry studies show that hardened fasteners can experience performance problems in wet or corrosive environments. Accordingly, use these products in dry and non-corrosive environments only.
### SCS Allowable Anchorage Loads to Steel (lb.)

<table>
<thead>
<tr>
<th>Anchorage Type</th>
<th>Minimum Base Material</th>
<th>No. of Anchors</th>
<th>Allowable Loads (lb.)</th>
<th>F₁</th>
<th>F₂ and F₃</th>
<th>F₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>#12–24 Self-Drilling Screws</td>
<td>A36 Steel 3/16&quot; thick</td>
<td>3</td>
<td>730</td>
<td>1,725</td>
<td>1,210</td>
<td></td>
</tr>
<tr>
<td>Simpson Strong-Tie X and XL Metal Screws</td>
<td></td>
<td>4</td>
<td>975</td>
<td>2,545</td>
<td>3,180</td>
<td></td>
</tr>
<tr>
<td>#14 Self-Drilling Screws</td>
<td>A36 Steel 3/16&quot; thick</td>
<td>3</td>
<td>730</td>
<td>1,730</td>
<td>1,210</td>
<td></td>
</tr>
<tr>
<td>Simpson Strong-Tie E Metal Screw E1814</td>
<td></td>
<td>4</td>
<td>975</td>
<td>2,620</td>
<td>2,620</td>
<td></td>
</tr>
<tr>
<td>Simpson Strong-Tie 0.157&quot; x 3/16&quot; Powder-Actuated Fasteners PDPAT-62KP ²</td>
<td>A36 Steel 3/16&quot; thick</td>
<td>3</td>
<td>—</td>
<td>780</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>0.157&quot; x 3/16&quot; Powder-Actuated Fasteners PDPAT-62KP ²</td>
<td></td>
<td>4</td>
<td>—</td>
<td>1,040</td>
<td>1,040</td>
<td></td>
</tr>
<tr>
<td>Simpson Strong-Tie 0.157&quot; x 3/16&quot; Powder-Actuated Fasteners PDPAT-62KP ²</td>
<td>A572 or A992 Steel 3/16&quot; thick</td>
<td>3</td>
<td>—</td>
<td>1,260</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>0.157&quot; x 3/16&quot; Powder-Actuated Fasteners PDPAT-62KP ²</td>
<td></td>
<td>4</td>
<td>—</td>
<td>1,710</td>
<td>1,710</td>
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<tr>
<td>Welded E70XX electrodes</td>
<td>A36 Steel 3/16&quot; thick</td>
<td>(2) Hard Side: 1.5&quot;</td>
<td>2,040</td>
<td>4,720</td>
<td>3,865</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(2) Free Side: 1.5&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. For additional important information, see General Notes on p. 4.
2. Allowable anchorage loads are also limited by the SCS Connector Loads on p. 2 for slide applications and p. 3 for fixed applications. Use the minimum tabulated values from the connector and anchorage load tables as applicable.
3. Allowable loads for self-drilling screws and PDPAT powder-actuated fasteners are based on installation in minimum 3/16"-thick structural steel with Fₛ = 36 ksi. PDPAT values are also provided for A572 steel. Values listed above maybe used where other thicknesses of steel are encountered provided that the fastener has equal or better tested values into thicker steels. It is the responsibility of the Designer to select the proper length fasteners based on the steel thickness installation.
4. For screw fastener installation into steel backed by concrete, predrilling of both the steel and the concrete is suggested. For predrilling, use a maximum 3/16"-diameter drill bit.
5. F₁, F₂, F₃ and F₄ load directions are the same as SCS Connector Loads on p. 2 for slide applications and p. 3 for fixed applications.
## SCS Seismic Bypass Framing Connector

### SCS Allowable Anchorage Loads to Concrete (lb.)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Anchor Bolt Quantity and Diameter</th>
<th>Nominal Embed. Depth, h_{nom} (in.)</th>
<th>Min Edge (in.)</th>
<th>Min End (in.)</th>
<th>Allowable Loads (lb.)</th>
<th>( f_c = 3,000 , \text{psi} )</th>
<th>( f_c = 4,000 , \text{psi} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>( F_1 )</td>
<td>( F_2 ) and ( F_3 )</td>
<td>( F_4 )</td>
</tr>
<tr>
<td>Titen HD®</td>
<td>(2) 3/4&quot;</td>
<td>1%</td>
<td>1½</td>
<td>2%</td>
<td>375</td>
<td>725</td>
<td>565</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2½</td>
<td>1½</td>
<td>2%</td>
<td>410</td>
<td>525</td>
<td>565</td>
</tr>
<tr>
<td>Strong-Bolt® 2</td>
<td>(2) 3/4&quot;</td>
<td>1%</td>
<td>4</td>
<td>4</td>
<td>750</td>
<td>1,245</td>
<td>750</td>
</tr>
<tr>
<td>Titen HD</td>
<td>(1) 1/2&quot;</td>
<td>3%</td>
<td>2½</td>
<td>2%</td>
<td>525</td>
<td>1,105</td>
<td>665</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3%</td>
<td>4</td>
<td>4</td>
<td>540</td>
<td>1,110</td>
<td>690</td>
</tr>
<tr>
<td>Strong Bolt 2</td>
<td>(1) 1/2&quot;</td>
<td>2½</td>
<td>4</td>
<td>4</td>
<td>1,035</td>
<td>1,065</td>
<td>1,145</td>
</tr>
<tr>
<td>AT-XP®</td>
<td>(1) 1/2&quot;</td>
<td>7</td>
<td>2½</td>
<td>2%</td>
<td>1,120</td>
<td>1,245</td>
<td>1,400</td>
</tr>
<tr>
<td>SET-XP®</td>
<td></td>
<td>7</td>
<td>2½</td>
<td>2%</td>
<td>1,160</td>
<td>1,145</td>
<td>1,450</td>
</tr>
<tr>
<td>SET-3G®</td>
<td></td>
<td>7</td>
<td>2½</td>
<td>2%</td>
<td>1,160</td>
<td>1,245</td>
<td>1,450</td>
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<td>1,210</td>
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1. Allowable anchor capacities have been determined using ACI 318-14. Appendix D calculations with a minimum concrete compressive strength \( f'_c \) of 3,000 and 4,000 psi in normal-weight concrete unless otherwise noted. Tabulated values shall be multiplied by a factor \( a \) of 0.6 for sand light-weight concrete.

2. Load values are for group anchors based on ACI 318, condition B, load factors from ACI 318-14 Section 5.3, no supplement edge reinforcement, \( \gamma_c = 1.0 \) for cracked concrete and periodic special inspection.

3. Allowable Stress Design (ASD) values were determined by multiplying calculated LRFD capacities by a conversion factor, Alpha (a), of 0.70 for seismic load and 0.6 for wind loads. ASD values for other combinations may be determined using alternate conversion factors.

4. Tabulated allowable ASD loads for Wind and Seismic in SDC A and B are based on using wind conversion factors and may be increased by 1.17 for SDC A and B only.

5. Design loads shall include the over-strength factor per ASCE7 Section 12.4.3. For fasteners in exterior wall connection systems, \( \Omega_o = 1.5 \) per Table 13.5-1.

6. Tabulated allowable loads are based on anchorage only. The capacity of the connection system shall be the minimum of the allowable anchorage load and the SCS allowable connector loads on p. 2 for slide applications and p. 3 for fixed applications.

7. Shaded values are limited by connector serviceability and strength in a single fastener anchorage.

8. For anchor subjected to both tension and shear loads, it shall be designed to satisfy the following:
   a. For \( N_s / N_{al} \leq 0.2 \), the full allowable load in shear is permitted.
   b. For \( V_{as} / V_{al} \leq 0.2 \), the full allowable load in tension is permitted.
   c. For all other cases, \( N_s / N_{al} + V_{as} / V_{al} \leq 1.2 \), where \( N_{al} \) = Applied ASD tension load. \( V_{as} \) = Applied ASD shear load. \( V_{id} \) = Allowable F<sub>2</sub> or F<sub>3</sub> load column from SCS allowable anchorage loads to concrete table.

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Test based on 16 ga. 50 ksi stud and 12 ga. generic clip with (3) #14 screws through slot with flat washer tested in same manner as Simpson Strong-Tie SCS 12 ga. 50 ksi clip in slide clip application.

The Re-engineered SCS Clip
Our engineering expertise went into our new SCS seismic bypass clip. All aspects of the clip were evaluated. One significant modification was the location of our screw holes and slots. Our tests showed that in-plane load is not evenly applied to all screws. In-plane load, or seismic shaking along the plane of the wall, applies predominantly to the first row of screws. Our SCS clip was designed to accommodate two shoulder screws at the first screw line, doubling the number of screws effectively resisting in-plane load.

Testing results explained:
To determine the in-plane performance of our SCS clips, Simpson Strong-Tie conducted full-scale cyclic testing on our uniaxial shake table at our Tye Gilb Research Laboratory in Stockton, CA. The full-scale test results were used to develop a representative component test to determine various combinations of stud/clip in-plane capacities. This first-of-its-kind testing represents something that was sorely needed because of the lack of industry testing and design standards. Our tests also allowed us to re-engineer the bypass clip to significantly increase the in-plane capacities. Prior to our tested values, various unproven calculation techniques have been used to estimate in-plane loads. Our tested in-plane loads eliminate the guesswork and thus mitigate risk for engineers, contractors and building owners.
The Complete Connector Solution

At Simpson Strong-Tie, we are committed to being your valued partner and total solutions provider for cold-formed steel (CFS) commercial curtain-wall, mid-rise and residential construction. Our products are manufactured with quality that our customers can rely on — with precision engineering and thorough lab testing. The result is, we deliver innovative and lower installed-cost solutions for CFS applications.

Drift Connectors
- IDCB Drift-Clip Bypass
- DSSCB Drift Strut Sliding-Clip Bypass

Deflection Connectors
- SCB/MSCB Bypass Framing Slide Clip
- SCB Seismic Bypass Framing Slide Clip
- SCHA Slide-Clip Connector for Horizontal Anchorage
- SSB Bypass Framing Slide-Clip Strut
- SCW Head-of-Wall Slide Clip

Rigid Connectors
- SFC Steel Framing Clip
- L, LS and S/LS Utility Clips and Skewable Angles
- RCA Rigid Connector Angle
- SHH Steel-Header Hanger
- FSB Bypass Framing Fixed-Clip Strut
- RCKW Kneewall Clip
- MSSC-KW Kneewall Clip
- SCC Steel-Stud Clip
- SJC Steel-Joist Clip
- FC Bypass Framing Fixed Clip
- FCB Bypass Framing Fixed Clip

Bridging and Bracing Connectors
- SUBH Bridging Clip
- SBR / DBR Spacer Bracers

Simpson Strong-Tie®
CFS Designer™ Software

Simpson Strong-Tie CFS Designer gives cold-formed steel (CFS) Designers the ability to design CFS beam-column members according to AISI specifications as well as analyze complex beam loading and span conditions. Intuitive design tools automate common CFS systems such as wall openings, 8-story stacked x-brace or shearwall, floor and roof piers and low-wall moment connections.